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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,152	01/13/2005	Fulvio Boldrini	2545-0465	9116

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EXAMINER

DESAI, HEMANT

ART UNIT PAPER NUMBER

3721

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/521,152	BOLDRINI ET AL.	
	Examiner	Art Unit	
	Hemant M. Desai	3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/13/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 21 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "the pre-folding station" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 29, the phrase "predetermined and uniform tempo" is vague, confusing and/or indefinite because it is not understood what predetermined and uniform tempo is.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 6-13, 16-21 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reil et al. (5069021) in view of Traczyk et al. (4732027).

Reil et al. disclose a system for manufacturing containers (9, fig. 1) comprising a supporting structure whereas the system is composed entirely of parts associated with the supporting structure (see fig. 2), namely, a forming sector (20, 21, 40, figs. 1-2)

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supplied with a continuous strip of forming material (2, figs. 1-2) used in the preparation of at least one blank (7, fig. 1) from which to fashion a respective container (9), and establishing a first leg of a feed path followed by the material (see fig. 1, ref. no. 20, 21, 22), a transfer device (25, fig. 2) operating downstream of the forming sector, serving to distance the forming material (7) from the forming sector and establishing a second leg of the feed path followed by the material (see fig. 1 and column 7, lines 57 to 62) and a shaping sector (8, fig. 2) operating downstream of the forming sector, by which each blank (7) emerging from the forming sector is folded and caused ultimately by means of a fixing operation (70, fig. 3) to assume the shape of the container (9) produced by the folding step, the shaping sector (8) establishing a third leg of the feed path followed by the forming material (see fig. 1, ref. no. 8, 9), the first leg of the feed path extending substantially parallel to the longitudinal dimension of the supporting structure (20, fig 2), the second leg of the feed path extending transversely to the first leg (see figs. 1 and 2, ref. no. 7, 25 and column 7, lines 57 to 60), the third leg of the feed path extending substantially parallel to the first leg and transversely to the second leg (see figs. 1 and 2, ref. no. 8 and column 7, line 67 to column 8, line 6 as well as column 9, lines 7 to 8).

Reil et al., as mentioned above, disclose all the limitations, except the footprint of the three legs having C-shaped configuration. However, Traczyk et al. teaches a system for manufacturing containers having C-shaped configuration (see fig. 1) to allow a single operator in the center to visually observe all modules without any movement (see col. 4, lines 60-68). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide C-shaped configuration of the three legs

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of the system for manufacturing containers of Reil et al. as taught by Traczyk et al. to allow a single operator in the center to visually observe all modules without any movement.

Regarding claim 2, the forming sector (20, 21, 40) (6) and the shaping sector (8) are arranged in line operationally, so that the path followed by the forming material (8, 9) when advancing between the forming sector and the shaping sector is substantially linear.

Regarding claim 3, wherein the shaping sector (8) comprises at least two substantially parallel shaping lines (see fig. 1) onto which the forming material (9) emerging from the forming sector is directed.

Regarding claim 6, the forming sector (20, 21, 40) comprises a feed station (1, fig. 1) supplying the forming material (2), a cutting station (6, fig. 1, 42, fig. 2) operating downstream of the feed station (1), by which the forming material (2) is divided into a succession of discrete lengths each constituting a respective blank (7, fig. 1), and a pre-forming station (8) operating downstream of the feed station, by which the forming material (2) is bent initially.

Regarding claim 7, the feed station comprises at least one main supply reel (1, fig. 1) carrying a coiled continuous strip (2) of the forming material and rotatable about a respective longitudinal axis in such a way that the continuous strip of forming material can be de-coiled.

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Regarding claim 8, the feed station comprises at least one auxiliary supply reel (23, figs. 1-2) carrying a further continuous strip (24, figs. 1-2) of the forming material that can be spliced to the continuous strip of the main reel.

Regarding claim 9, the first leg of the feed path followed by the forming material is established by a plurality of guide elements (3, fig. 2) constituting part of the feed station.

Regarding claim 10, the system comprising a traction device (41, fig. 2) operating by direct interaction with the forming material at a point downstream of the feed station and serving to de-coil the selfsame material from the relative supply reel.

Regarding claim 11, the traction device (41) comprises a pair of pinch rolls (see fig. 2), positioned mutually tangential and establishing a passage through which the forming material is directed.

Regarding claim 12, the system comprising one tensioning device (4a, 4b, fig. 2) operating upstream of the traction device (41) and in such a manner that the segment of forming material extending downstream of the selfsame device is subjected to a predetermined longitudinal tension.

Regarding claim 13, the tensioning device comprises at least one pair of pinch rolls (4a, 4b), positioned mutually tangential and establishing a passage (16b) through which the forming material is directed, including at least one roll subjected to a braking action when in rotation in such a way as to tension the forming material advancing through passage of the device.

Regarding claims 16 and 17, the scoring station (40, fig. 2) is positioned to operate at a point along the feed path followed by the forming material (9), between the feed station and the cutting station (6).

Regarding claims 18 and 19, the cutting station (6, 42) can be timed to alternate between the idle position and the operating position synchronously with the movement of the press of the scoring station (40) between the relative idle position and operating position, in such a manner that the press of the scoring station and the blade of the cutting station are made to engage the advancing forming material simultaneously.

Regarding claim 20, the transfer device comprises at least one gripper element (4a, 4b) serving to take up each blank of forming material) released from the cutting station (42), and capable of movement along the second leg of the feed path between the cutting station (42) and the shaping sector (8) to the end of advancing each successive blank (7).

Regarding claim 21, the pre-folding station (8) operates at a point on the second leg of the feed path downstream of the cutting station (42), in such a manner as to initiate a bend in the length of forming material edge of the advancing material (7).

Regarding claim 26, the shaping sector comprises a folding station (27, fig. 2) at which each blank (7) is bent along the crease lines in such a way as to take on the shape of the container (8) being manufactured, and a sealing or welding station (see fig. 3) located downstream of the folding station (27), where each blank (7) is secured in the configuration presented on emerging from the folding station (27) to assume the definitive shape of the relative container.

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Regarding claim 27, the sealing or welding station comprises at least one sealer or welder (70, fig. 3) to fix each blank (7) in the definitive configuration of the manufactured container.

Regarding claim 29, the system comprising feed means (3, 4a, 4b, 41) and serving to guarantee the movement of the folding material (7) between the stations of the system.

5. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reil et al. and Traczyk et al. as applied to claim 12 above, and further in view of Ammons et al. (6599225).

The system for manufacturing containers of Reil et al. as modified by Traczyk et al. meets all the claimed limitations of claims 14 and 15, except for a sterilizing device. However, Ammons et al. teach the sterilizing device (328, figs. 3-4) in the system of manufacturing containers to sterilize the containers. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the sterilizing device in the modified system for manufacturing containers of Reil et al. as taught by Ammons et al. to sterilize the containers.

6. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reil et al. and Traczyk et al. as applied to claim 10 above, and further in view of Mongard (5704541).

The system for manufacturing containers of Reil et al. as modified by Traczyk et al. meets all the claimed limitations of claims 22-25, except for the seam-folding means by which the bonding edge is bent double along its length in such a way that the bonding

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edge of each blank will present a treated portion directed toward the inside of the relative container. However, Mongard, teaches the seam-folding means by which the bonding edge is bent double along its length (see figs. 2-4) so that that the side edge is not exposed to the liquid product within the container and thus to prevent soaking of the paper board core of the container thereby degrading the seals and compromising the integrity of the package by preventing the wicking or capillary action (see col. 2, lines 5-11; col. 3, lines 35-29). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the bonding edge is bent double along its length in the folding means of the modified system for manufacturing containers of Reil et al. as taught by Mongard to prevent soaking of the paper board core of the container thereby degrading the seals and compromising the integrity of the package by preventing the wicking or capillary action.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemant M. Desai whose telephone number is (571) 272-4458. The examiner can normally be reached on 7:00 AM-5: 30 PM, Mon-Thurs...

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hemant M. Desai

Hemant M Desai
Examiner
Art Unit 3721

HMD